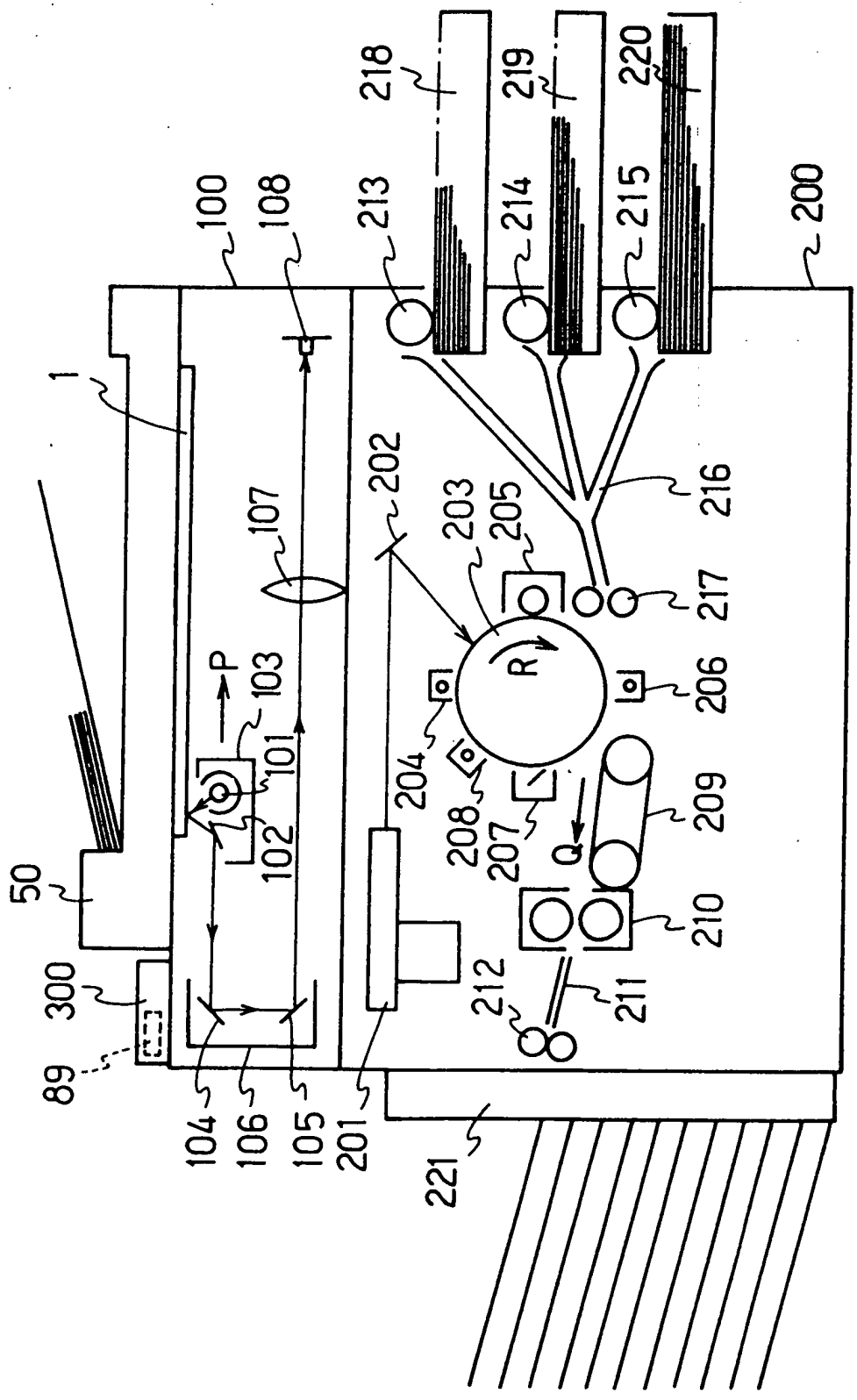
218
219
220
100
108
213
214
215
200
1
202
107
203
205
216
217
P
103
101
R
206
204
102
208
207
Q
209
50
210
212
211
300
89
104
106
105
201
221

FIG. 1

358|1.11

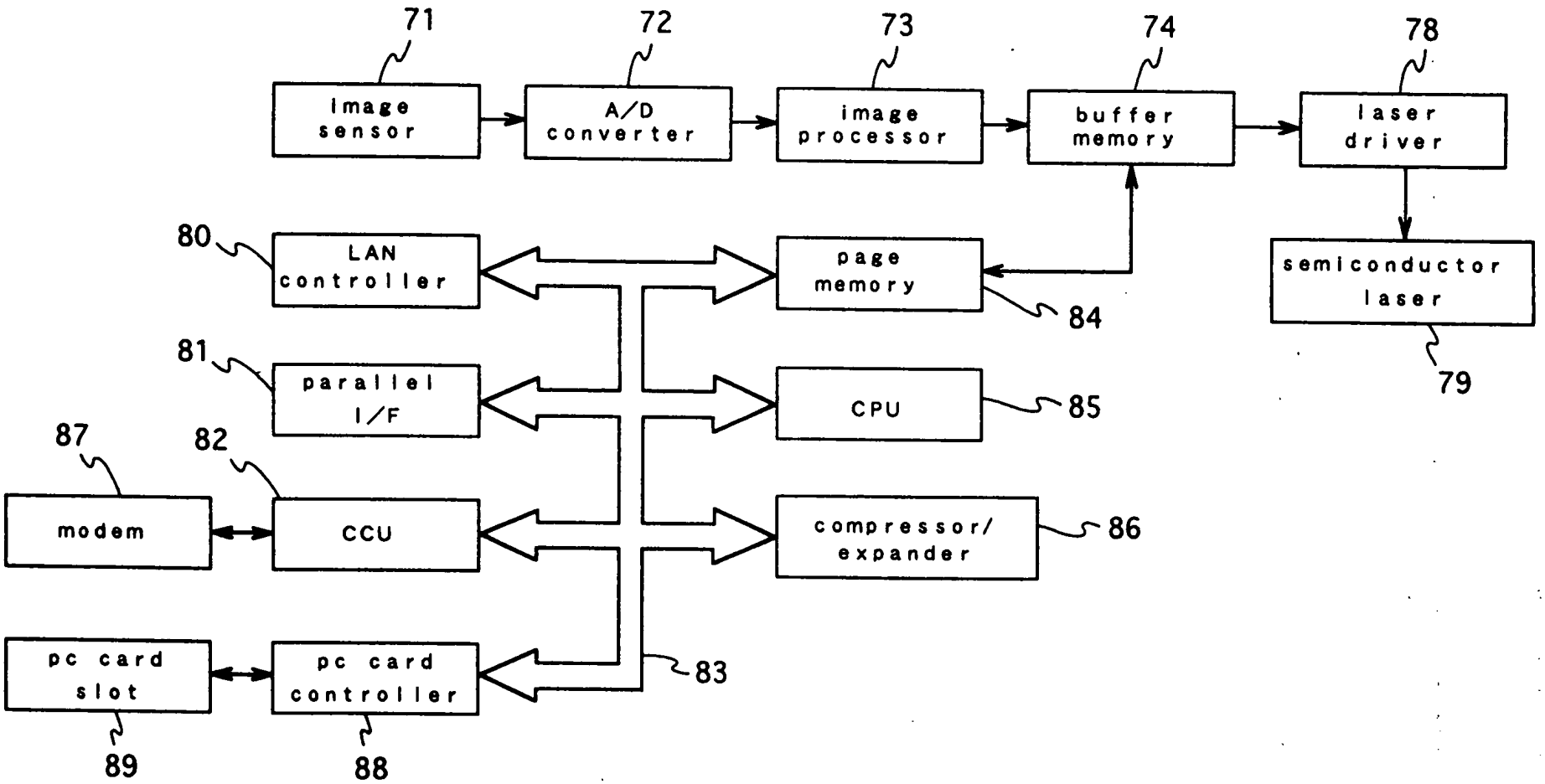
71
image sensor
72
A/D converter
73
image processor
74
buffer memory
78
laser driver
80
LAN controller
page memory
84
semiconductor laser
79
81
parallel I/F
CPU
85
87
82
modem
CCU
compressor/ expander
86
pc card slot
pc card controller
83
89
88

FIG. 2

PaperSize	A4, A4R, B4, A3, B5, B5R
Resolution	400, 600
GrayLevel	1, 2, 4, 8
FileFormat	TIFF, JPEG, PCL5
TIFFCompression	G3, G4, RLE, LZW
BothSidePrint	No, Yes
CenterBinding	No, Yes
Sort	No, Stack, Sort
MaxSort	20
MaxStack	100
Staple	No, Yes
StaplePosition	1, 2, 3, 4
MaxStapleSheets	50
Punch	No, Yes
MaxPunchSeet	50

FIG. 3

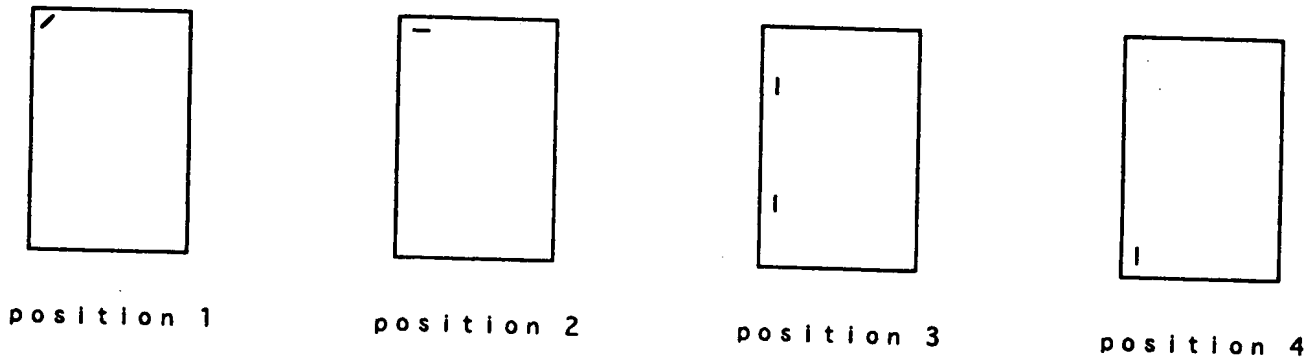

FIG. 4

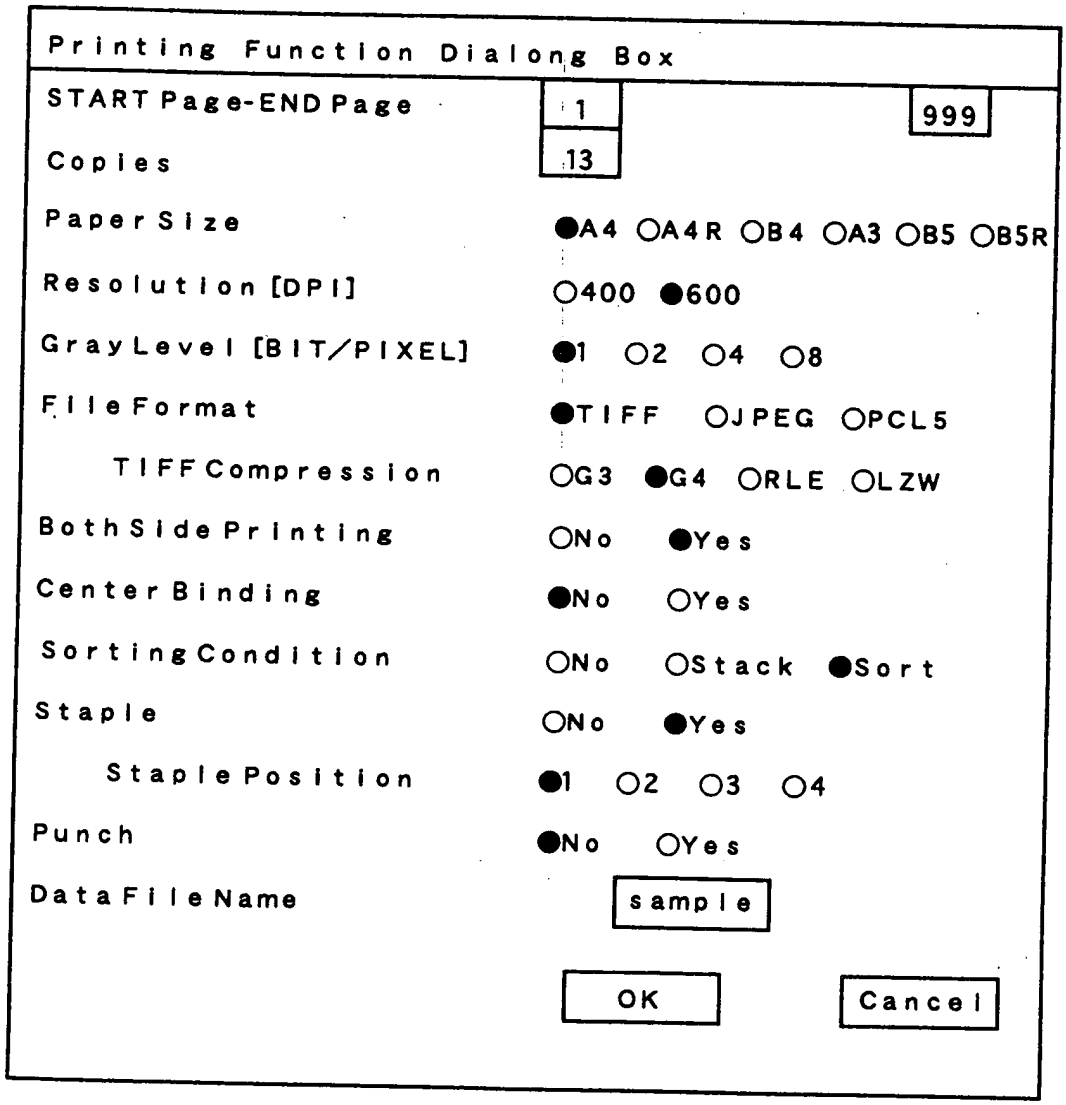
Printing Function Dialong Box
START Page-END Page
1
999
Copies
13
Paper Size
●A4 ○A4R ○B4 ○A3 ○B5 ○B5R
Resolution [DPI]
○400 ●600
Gray Level [BIT/PIXEL]
●1 ○2 ○4 ○8
File Format
●TIFF ○JPEG ○PCL5
TIFF Compression
○G3 ●G4 ○RLE ○LZW
Both Side Printing
○No ●Yes
Center Binding
●No ○Yes
Sorting Condition
○No ○Stack ●Sort
Staple
○No ●Yes
Staple Position
●1 ○2 ○3 ○4
Punch
●No ○Yes
Data File Name
sample
OK
Cancel

FIG. 5

```
Reset
Copies          13
PaperSize       A4
Resolution      600
GrayLevel       1
FileFormat      TIFF
        TIFFCompression G4
BothSidePrint   Yes
CenterBinding   No
Sort            Sort
Staple          Yes
     StaplePosition 1
Punch           No
DataFile        sample.tif
```

FIG. 6

0052070 5554250

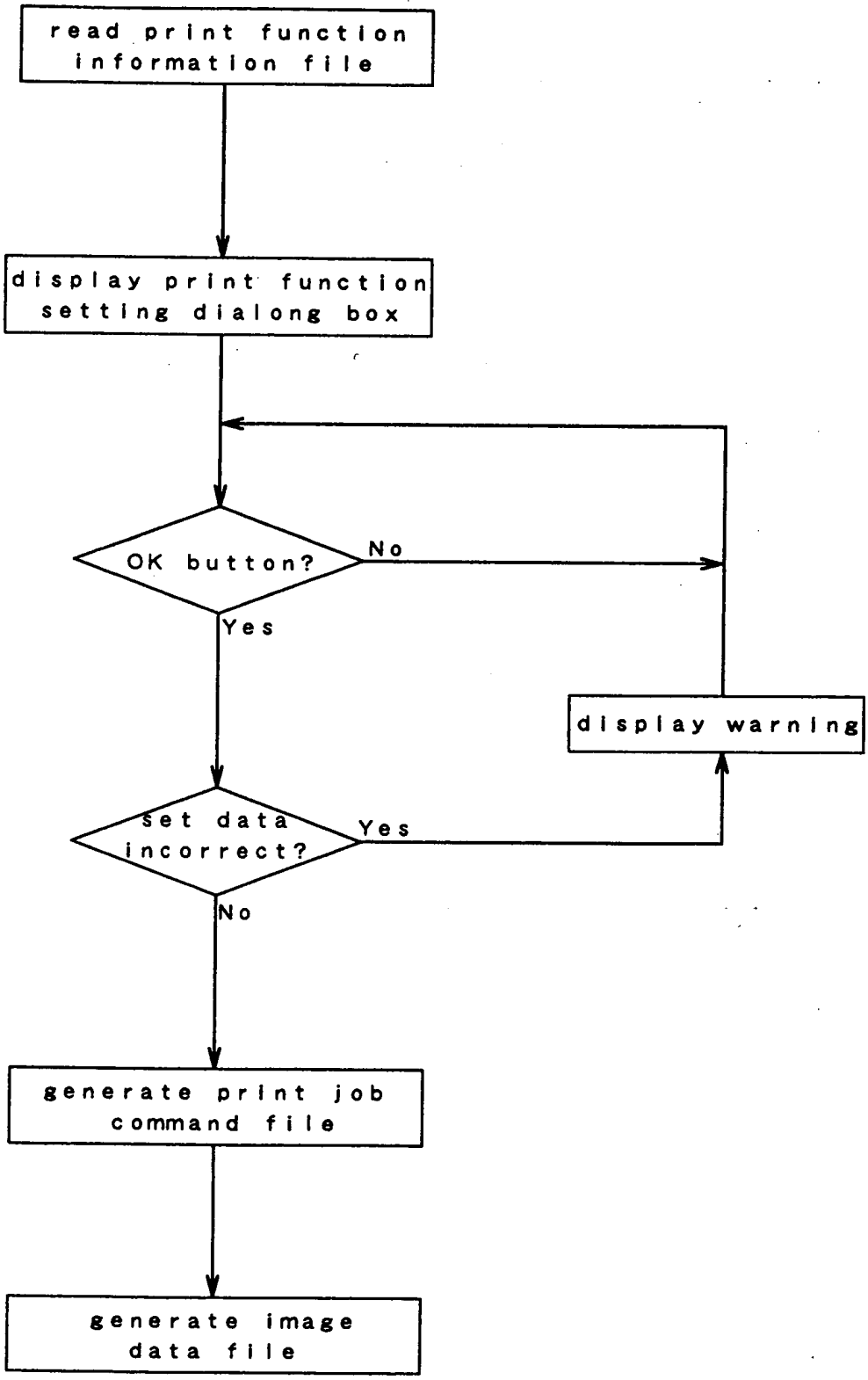
read print function information file
display print function setting dialong box
OK button?
No
Yes
display warning
set data incorrect?
Yes
No
generate print job command file
generate image data file

FIG. 7

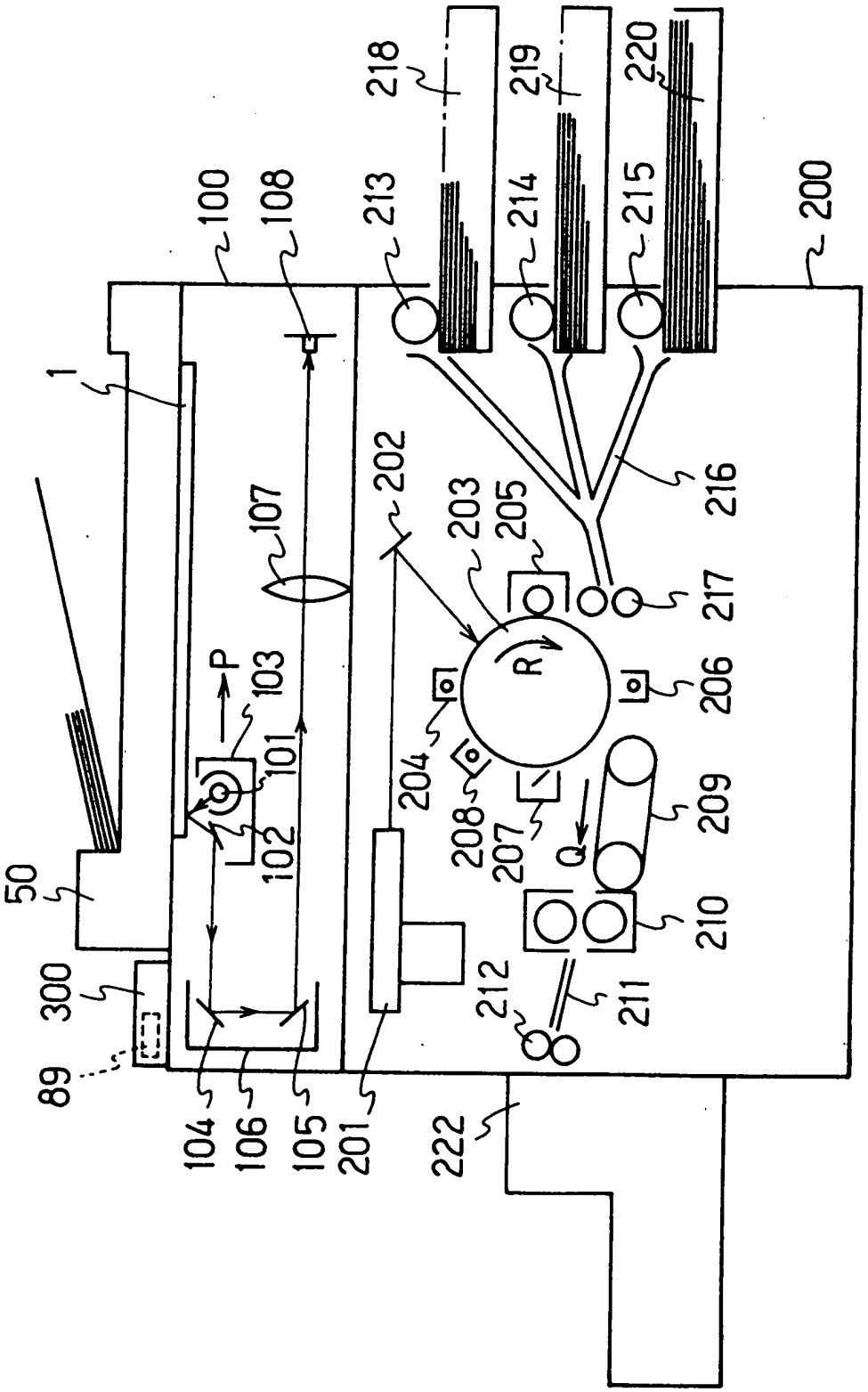
1
50
89
100
104
106
105
107
108
300
101
102
103
P
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
222
200
R
Q

FIG. 8

PaperSize	Auto,A4, A4R, B4, A3, B5, B5R
PaperFeed	Auto, ADF, FlatBed
MAXResolution	400
MINResolution	25
GrayLevel	1,2,4,8
Halftone	BI, DT, ED
FileFormat	TIFF, BMP, JPEG
TIFFCompression	G3, G4, RLE, LZW
BothSideScan	No, Yes
Contrast	Auto, −2, −1, 0, 1, 2
Density	Auto, −2, −1, 0, 1, 2
EdgeEnhance	Auto, −2, −1, 0, 1, 2
ScanArea	No, Yes
ScanAreaUnit	mm

FIG. 9

Scanning Function Dialong Box

Paper Size	●Auto ○A4 ○A4R ○B4 ○A3 ○B5 ○B5R
Paper Feed	●Auto ○ADF ○FlatBed
Scanning Resolution [DPI]	100 [25-400]
Gray Level [BIT/PIXEL]	●1 ○2 ○4 ○8
Halftone Processing	●Binarzing ○Dithering ○Error Diffusion
File Format	●TIFF ○BMP ○JPEG
TIFF Compression	○G3 ●G4 ○RLE ○LZW
Both Side Scanning	○No ●Yes
Contrast	●Auto ○-2 ○-1 ○0 ○1 ○2
Density	●Auto ○-2 ○-1 ○0 ○1 ○2
Edge Enhancement	●Auto ○-2 ○-1 ○0 ○1 ○2
Scanning Area Setting	○No ●Yes
Scanning Area Upper-Left Position [mm]	X= 10 Y= 20
Scanning Area Length	Upper-Left [mm] X= 60 Y= 70
Data File Name	sample

OK Cancel

FIG. 10

```
Reset
PaperSize       Auto
PaperFeed       Auto
Resolution      100
GrayLevel       1
Halftone        BI
FileFormat      TIFF
          TIFFCompression G4
BothSideScan    Yes
Contrast        Auto
Density         Auto
EdgeEnhance     Auto
ScanArea        Yes
ScanAreaPosition 10, 20
ScanAreaLength    60, 70
DataFile        sample.tif
```

FIG. 11

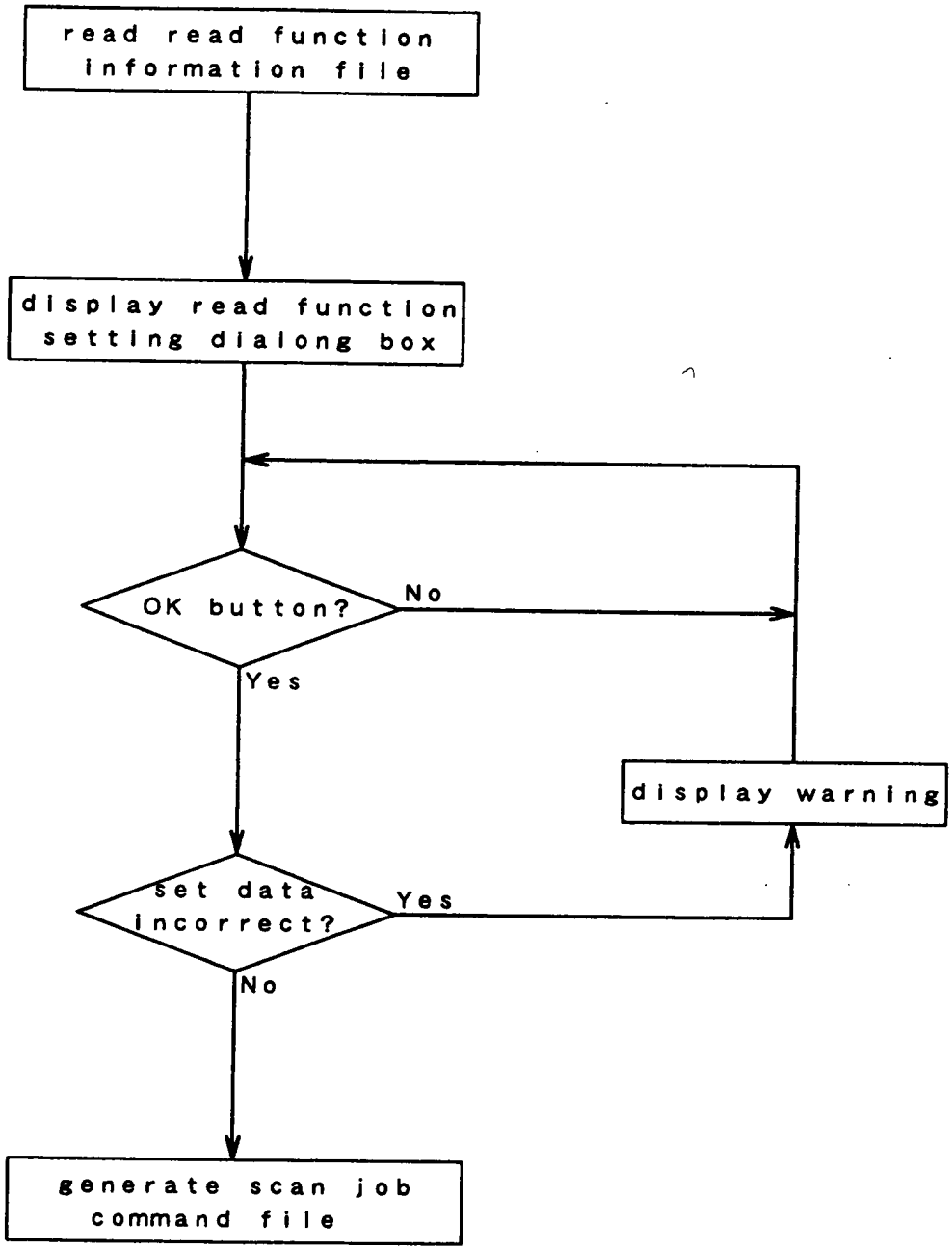
read read function information file
display read function setting dialong box
OK button?
No
Yes
display warning
set data incorrect?
Yes
No
generate scan job command file

FIG. 12

0053270 "556h2960

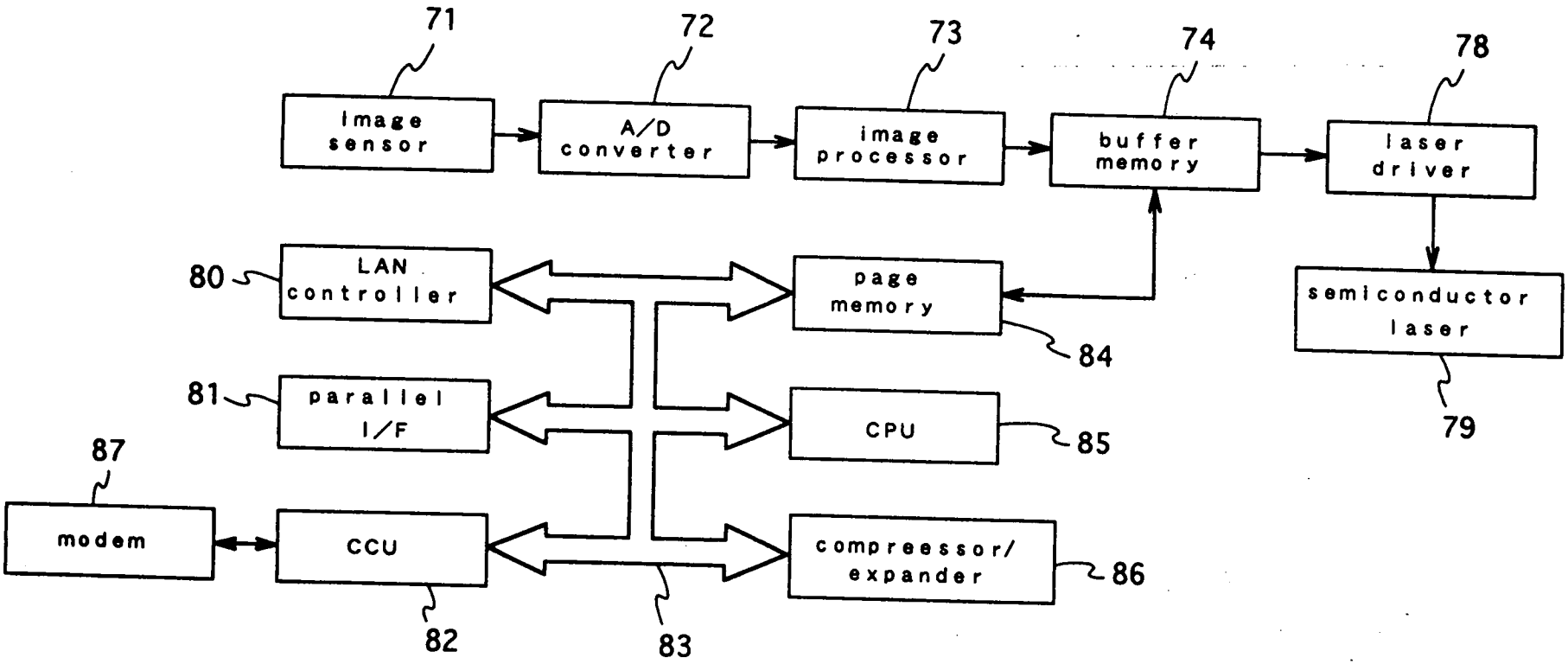

FIG. 13 (PRIOR ART)

005240 "556h2960

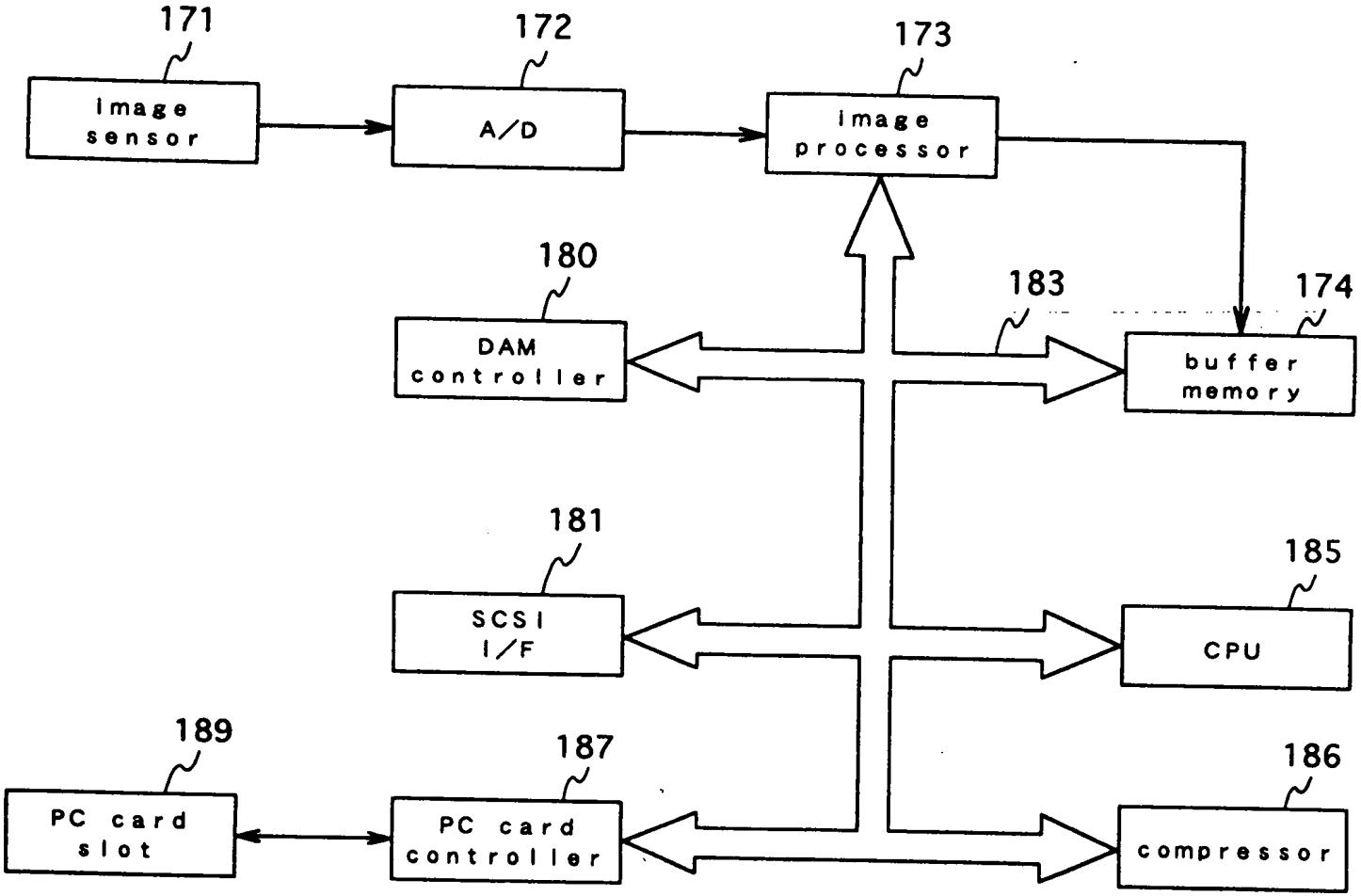

FIG. 14

005820 "S56-82960

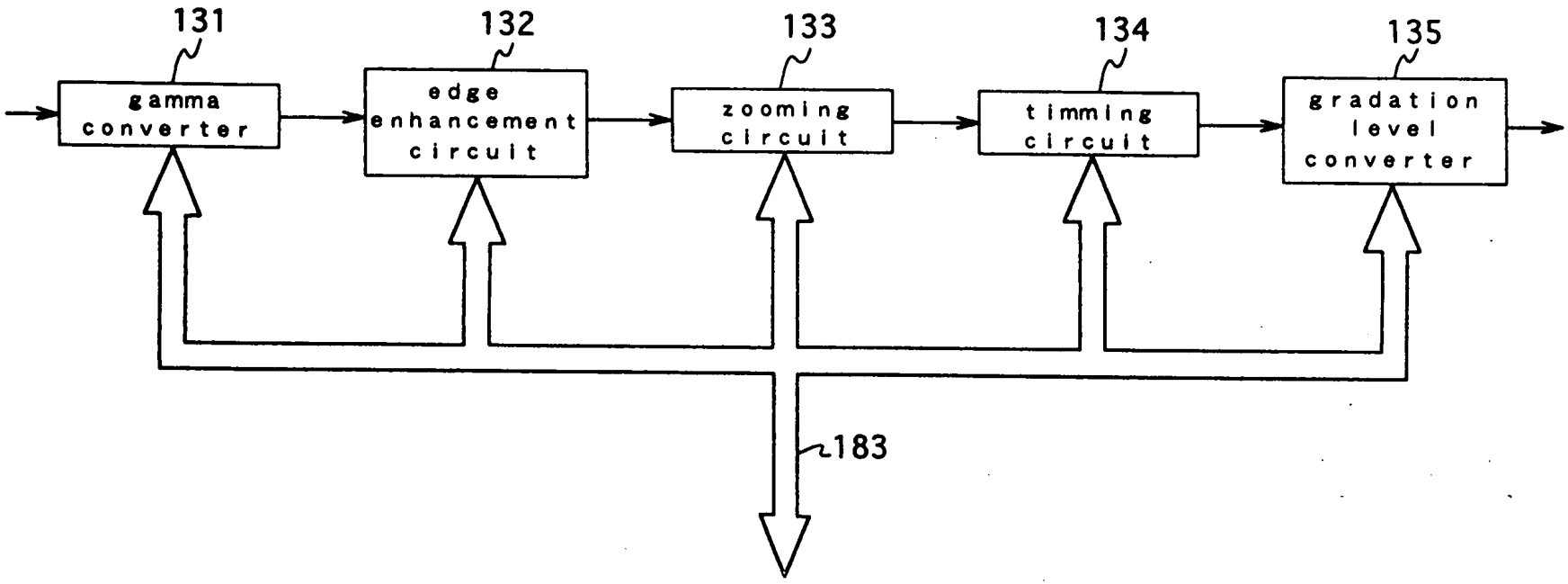

FIG. 15

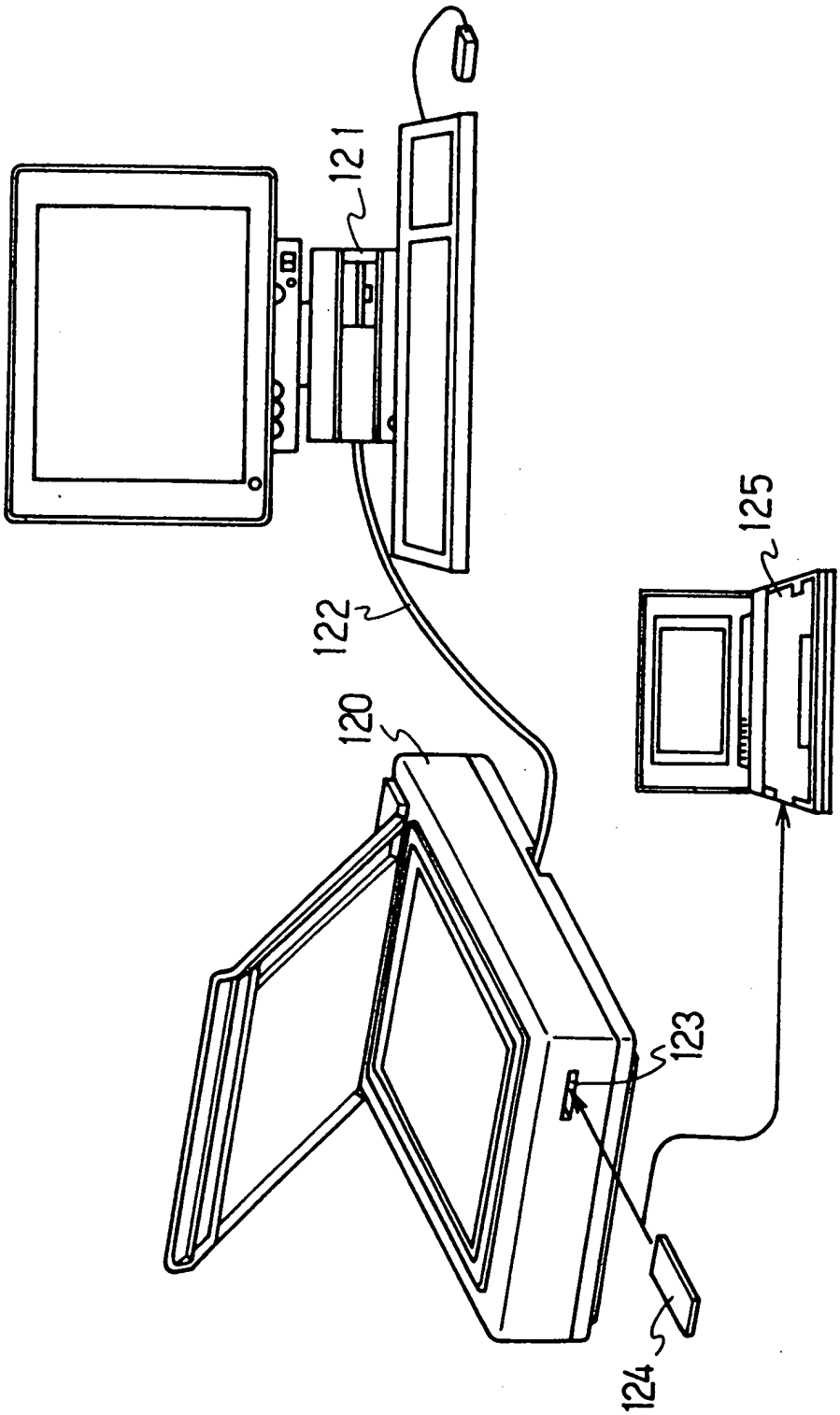

FIG. 16

PaperSize	Auto,A4, A4R, B4, A3, B5, B5R
PaperFeed	Auto, ADF, FlatBed
MAXResolution	1200
MINResolution	25
GrayLevel	1, 4, 8
if GrayLevel==1 then Halftone BI,DT, ED	
if GrayLeval==4 then Quantizing SIMPLE, DT, ED	
FileFormat	TIFF, BMP, JPEG
if File Format==TIFF && Gray Level==1 then Compression G3,G4,RLE,NO	
if File Format==TIFF && Gray Level==4 then Compression LZW,NO	
if File Format==TIFF && Gray Level==8 then Compression LZW, JPEG, NO	
if File Format==JPEG||Compression==JPEG then Compression Rate Normal,High,Low	
Contrast	Auto, −2, −1, 0, 1, 2
Density	Auto, −2, −1, 0, 1, 2
EdgeEnhance	Auto, −2, −1, 0, 1, 2
ScanArea	No, Yes
ScanAreaUnit	mm

FIG. 17

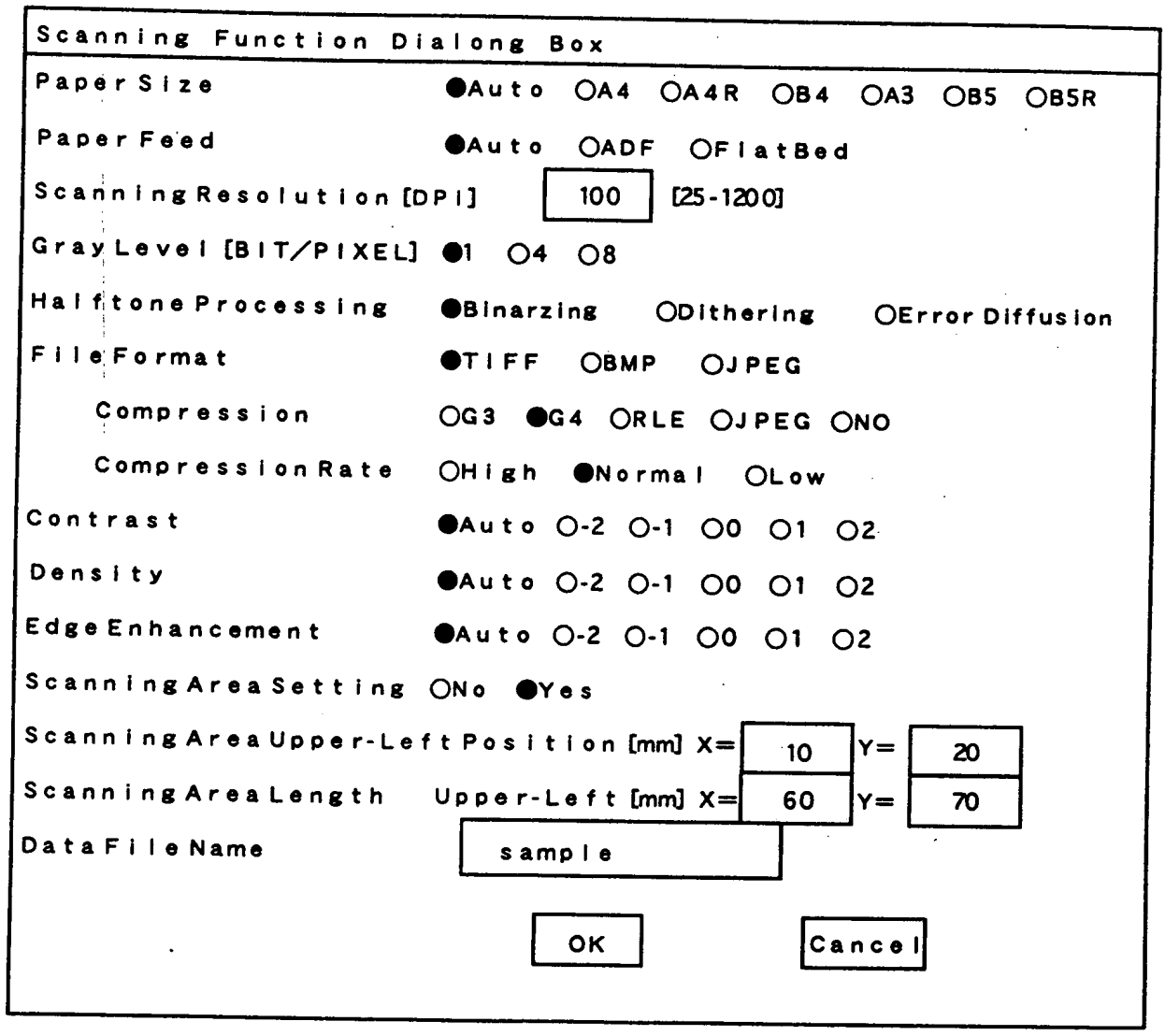
Scanning Function Dialong Box
Paper Size ●Auto ○A4 ○A4R ○B4 ○A3 ○B5 ○B5R
Paper Feed ●Auto ○ADF ○FlatBed
Scanning Resolution [DPI] 100 [25-1200]
Gray Level [BIT/PIXEL] ●1 ○4 ○8
Halftone Processing ●Binarzing ○Dithering ○Error Diffusion
File Format ●TIFF ○BMP ○JPEG
Compression ○G3 ●G4 ○RLE ○JPEG ○NO
Compression Rate ○High ●Normal ○Low
Contrast ●Auto ○-2 ○-1 ○0 ○1 ○2
Density ●Auto ○-2 ○-1 ○0 ○1 ○2
Edge Enhancement ●Auto ○-2 ○-1 ○0 ○1 ○2
Scanning Area Setting ○No ●Yes
Scanning Area Upper-Left Position [mm] X= 10 Y= 20
Scanning Area Length Upper-Left [mm] X= 60 Y= 70
Data File Name sample
OK
Cancel

FIG. 18

0955955 0955955

```
Reset
PaperSize       Auto
PaperFeed       Auto
Resolution      100
GrayLevel       1
Halftone        BI
FileFormat      TIFF
          Compression G4
Contrast        Auto
Density         Auto
EdgeEnhace      Auto
ScanArea        Yes
ScanAreaPosition 10, 20
ScanAreaLength    60, 70
DataFile        sample.tif
```

FIG. 19

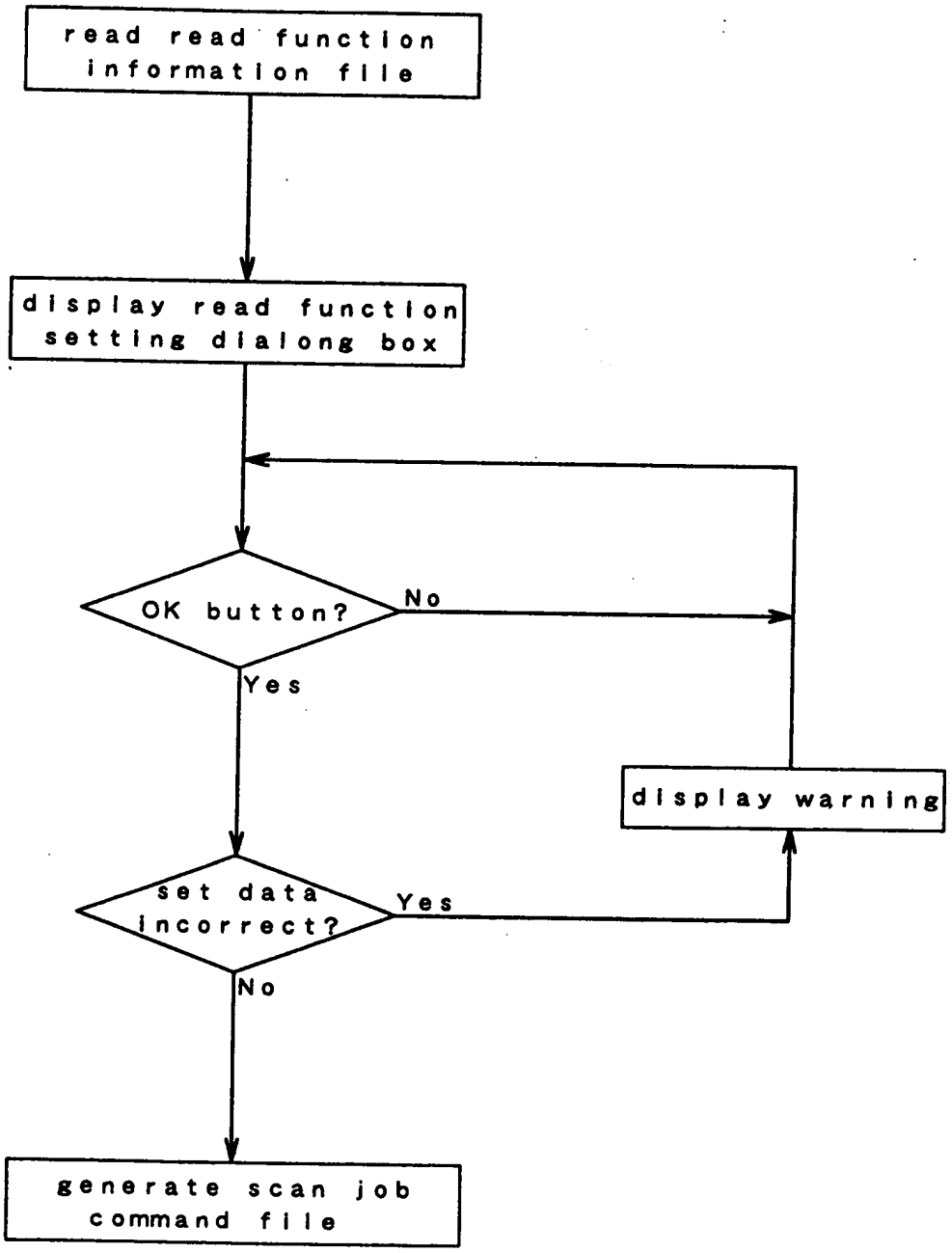
read read function information file
display read function setting dialong box
OK button?
No
Yes
display warning
set data incorrect?
Yes
No
generate scan job command file

FIG. 20

0052D' 556h2960

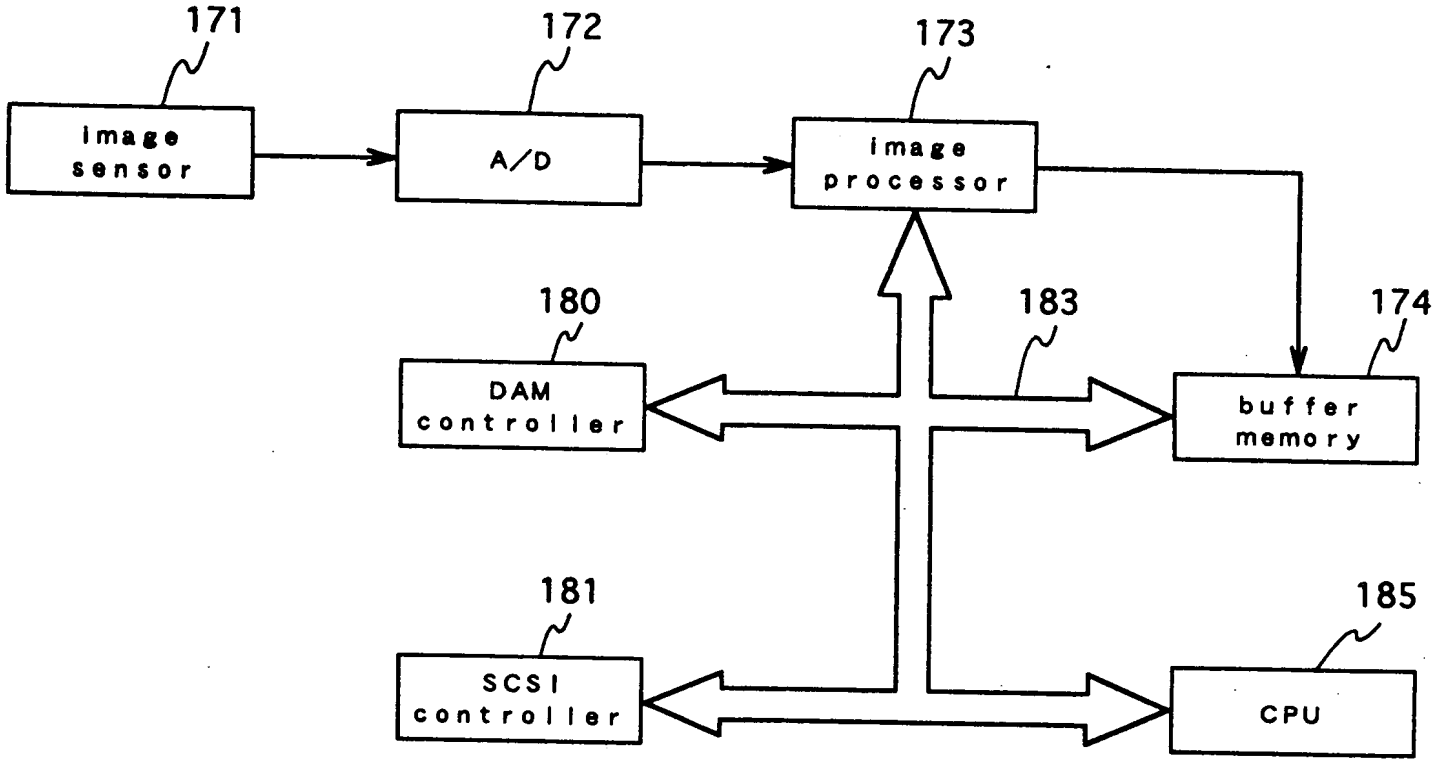

FIG. 21 (PRIOR ART)